

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/541,956	10/31/2005	Wolfgang Clemens	411000-137	8177	
27162	7590 08/25/2006		EXAMINER		
CARELLA	CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI,			ARORA, AJAY	
STEWART & OLSTEIN 5 BECKER FARM ROAD			ART UNIT	PAPER NUMBER	
	D, NJ 07068	2811			
			DATE MAILED: 08/25/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/541,956	CLEMENS ET AL.			
Office Action Summary	Examiner	Art Unit			
	Ajay K. Arora	2811			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a repty be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on  2a) This action is FINAL.  2b) This action is non-final.  3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ☐ Claim(s) 1-21 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-21 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9)☐ The specification is objected to by the Examiner.  10)☒ The drawing(s) filed on 7/8/05 is/are: a)☒ accepted or b)☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Motice of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)			
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date 7/8,9/30, 10/31/05.</li> </ul>	Paper No(s)/Mail Da				

Application/Control Number: 10/541,956

Art Unit: 2811

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims Claims 1-7, 9-11, 14-18 and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayashi (US 2001/0046081) hereinafter Hayashi

Regarding claim 1, Hayashi (refer to Figures 1A-1F, 2A-2E, 3C, 3D and 4C) teaches a circuit board or substrate for an electronic device, comprising: a substrate (page 6, para 0117), at least one active organic (page 8, para 0147) electronic component (with source electrode 33, as shown in Figure 4C) integrated on the substrate; the organic electronic component having at least one electrode layer (31, see Figure 4c); the at least one electrode layer of the integrated active organic electronic component forming a conductive track layer (16d of Figures 3C or 3D) of a base plate for a conventional semiconductor component (page 8, para 148, 1st sentence and para 149).

Regarding claim 2, Hayashi teaches a circuit board or substrate for an electronic device comprising: a substrate (page 6, para 0117); and at least one active organic (page 8, para 0147) component (with source electrode 33, as shown in Figure 4C) and at least

Art Unit: 2811

one passive organic component (page 8, para 0149, 2<sup>nd</sup> last sentence) integrated on the substrate.

Regarding claim 3, Hayashi teaches that the at least one active component is an organic transistor (page 8, para 0147 or para 151, 1<sup>st</sup> sentence), and/or the passive organic component is an electrically conducting connection ((page 8, para 0149, 2<sup>nd</sup> last sentence).

Regarding claim 4, Hayashi teaches that the device includes a power supply (page 8, para 0144, 1<sup>st</sup> sentence) integrated on the substrate (page 8, para 0145, 1<sup>st</sup> sentence).

Regarding claim 5, Hayashi teaches that the substrate wherein an input element (page 6, para 0112 and para 0113) and/or an output element (page 6, para 0110)) is integrated on the substrate.

Regarding claim 6, Hayashi teaches the substrate wherein electrically conductive lines or conducting contacts are produced using structured conductive layers, electrodes such as source and drain electrodes and/or conductive adhesives (page 8, para 0147, 1<sup>st</sup> and 2<sup>nd</sup> sentence).

Regarding claim 7, Hayashi teaches an inexpensive visualization element and/or a display (Col. 4, lines 52 and 55) is integrated on the substrate.

Application/Control Number: 10/541,956 Page 4

Art Unit: 2811

Regarding claim 9, Hayashi teaches that a driver circuit associated with the display is integrated on the substrate (page 8, para 0146).

Regarding claim 10, Hayashi teaches that a driver electronics is included and comprises at least one organic field-effect transistor (page 8, para 0151, 1<sup>st</sup> sentence).

Regarding claim 14, Hayashi teaches that a driver electronics is included and comprises at least one organic field-effect transistor (page 8, para 0151, 1<sup>st</sup> sentence).

Regarding claims 11, 15-18, 20 and 21, the claims merely recite use language. The device of Hayashi, which is a display device, is capable of being used at least as a price marker.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2811

Claims 8, 12, 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi in view of Antoniadis (US 6,366,017), hereinafter Antoniadis.

Regarding claim 8, Hayashi teaches that the display comprises electrochromic material (page 6, para 0125) or liquid crystalline elements (page 6, para 0124, 2<sup>nd</sup> sentence), However, Hayashi does not teach that the display comprises organic light-emitting diodes. Antoniadis US (6,366,017) teaches the use the use of organic light-emitting diodes in displays (Col. 1, lines 10-15). It would have been obvious to one of ordinary skills in the art at the time of the invention to modify Hayashi so that the display comprises electrochromic material, liquid crystalline elements and/or organic light-emitting diodes. The ordinary artisan would have been motivated to modify Hayashi for at least the purpose of optimizing display design taking advantage of the good resolution resulting from liquid crystal elements, the ability to use non-transparent substrates with organic light-emitting diode, and the reduced power consumption advantage of electrochromic materials.

Regarding claim 12, Hayashi teaches that a driver circuit associated with the display is integrated on the substrate (page 8, para 0146).

Regarding claim 13, Hayashi teaches that a driver electronics is included and comprises at least one organic field-effect transistor (page 8, para 0151, 1<sup>st</sup> sentence).

Application/Control Number: 10/541,956 Page 6

Art Unit: 2811

Regarding claim 19, the claims merely recite use language. The device of Hayashi, which is a display device, is capable of being used at least as a price marker.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay K. Arora whose telephone number is (571) 272-8347. The examiner can normally be reached on Mon through Fri, 8am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on (571) 272-1732. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SUPERVISORY PATENT EXAMINER

**TECHNOLOGY CENTER 2800**